

IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) An audio recorder-player, comprising:

means for tuning to at least two audio sources to thereby generate first and second audio signals;

means for generating first and second audio signal

5 characteristics responsive to the first and second audio signals, said audio signal characteristics including tempo, tone, and energy for music, and words extracted from speech;

means for storing both the first and second audio signals and the first and second audio signal characteristics; and

10 means for reproducing one of the first and second audio signals responsive to selection of one of the first and second audio signal characteristics.

2. (Currently Amended) The audio recorder-player as ~~recited~~ claimed in claim 1, wherein the audio recorder-player is included in a radio.

3. (Currently Amended) The audio recorder-player as ~~recited~~ claimed in claim 1, wherein the audio recorder-player is included in a computer.

4. (Currently Amended) The audio recorder-player as ~~recited~~  
claimed in claim 1, wherein the audio recorder-player is included  
in a set-top box.

5. (Currently Amended) The audio recorder-player as ~~recited~~  
claimed in claim 1, wherein the storing means comprises a hard  
disk.

6. (Currently Amended) The audio recorder-player as ~~recited~~  
claimed in claim 1, wherein the tuning means comprises software  
routines instantiated by a processor.

7. (Currently Amended) The audio recorder-player as ~~recited~~  
claimed in claim 1, wherein the generating means comprises a voice  
recognition routine instantiated by a processor.

8. (Currently Amended) The audio recorder-player as ~~recited~~  
claimed in claim 1, wherein the audio recorder-player further  
~~comprising~~comprises:

means for applying a control signal generated in response  
5 to a spoken command to thereby control the reproducing means.

9. (Original) An audio recorder-player, comprising:

means for tuning to at least two audio sources to thereby generate first and second audio signals;

means for generating N audio signal characteristics  
5 including silence, single speaker speech, music, environmental noise, multiple speakers' speech, simultaneous speech and music, and speech and noise for both the first and second audio signals;

means for storing both the first and second audio signals and the first and second audio signal characteristics; and

10 means for reproducing one of the first and second audio signals responsive to selection of one of the N audio signal characteristics.

10. (Currently Amended) An audio recorder-player, comprising:

M tuners that generate N audio signals transmitted by N audio sources;

an analyzer that extracts R x N audio signal  
5 characteristics from the N audio signals, said audio signal characteristics including tempo, tone, and energy for music, and words extracted from speech;

a memory that stores the R x N audio signal characteristics; and

10           output circuitry that reproduces an audio signal  
corresponding to one of the N audio signals responsive to selection  
of at least one of the R x N audio signal characteristics,  
———wherein R is a positive integer and M and N are positive  
integers greater than 1.

11. (Currently Amended)    The audio recorder-player as ~~recited~~  
claimed in claim 10, wherein the memory comprises a hard disk.

12. (Currently Amended)    The audio recorder-player as ~~recited~~  
claimed in claim 10, wherein each of the M tuners comprises a  
software routine instantiated by a processor.

13. (Currently Amended)    The audio recorder-player as ~~recited~~  
claimed in claim 10, wherein the analyzer comprises a voice  
recognition routine instantiated by a processor.

14. (Currently Amended)    The audio recorder-player as ~~recited~~  
claimed in claim 13, wherein the voice recognition routine  
generates signals that control the output circuitry in response to  
a spoken command.

15. (Currently Amended)    An operating method for an audio  
recorder-player including M tuners, an analyzer, a storage device,

and audio output circuitry, said operating method comprising the steps of:

5           operating the M tuners to acquire N audio signals from N audio sources;

          operating the analyzer to characterize the N audio signals and generate R x N audio signal characteristics, said audio signal characteristics including tempo, tone, and energy for music, and  
10 words extracted from speech;

          storing both the N audio signals and the R x N audio signal characteristics in the storage device; and

          reproducing a selected one of the N audio signals via the audio output circuitry responsive to selection of one of the R x N  
15 audio signal characteristics,

—————wherein R is a positive integer and M and N are positive integers greater than 1.

16. (Currently Amended)   The operating method as ~~recited~~claimed in claim 15, wherein M is equal to N.

17. (Currently Amended)   The operating method as ~~recited~~claimed in claim 15, wherein:

          one of the N audio signals is stored while one of the M tuners is tuned to a respective one of the N audio sources; and

5           the R x N audio signal characteristics are extracted from  
the stored N audio signals.

18. (Currently Amended)    The operating method as ~~recited~~claimed  
in claim 15, wherein selected ones of the R x N audio signal  
characteristics correspond to tempo, tone, and energy for music  
included in the N audio signals.

19. (Currently Amended)    The operating method as ~~recited~~claimed  
in claim 15, wherein selected ones of the R x N audio signal  
characteristics correspond to words extracted from speech included  
in the N audio signals.

20. (Currently Amended)    The operating method as ~~recited~~claimed  
in claim 15, wherein said operating method further  
~~comprising~~comprises:

          generating a control signal for causing the audio output  
5   circuitry to reproduce the selected one of the N audio signals  
responsive to a user selected one of the R x N audio signal  
characteristics.

21. (Currently Amended)    An operating method for an audio  
recorder-player including M tuners, an analyzer, a storage device,

and audio output circuitry, said operating method comprising the steps of:

5           operating the M tuners to acquire N audio signal segments from N audio sources;

          operating the analyzer to characterize the N audio signal segments and generate R x N audio signal characteristics, said audio signal characteristics including tempo, tone, and energy for  
10 music, and words extracted from speech;

          storing the R x N audio signal characteristics in the storage device; and

          reproducing audio signals generated by a selected one of the N audio sources via the audio output circuitry responsive to  
15 selection of one of the R x N audio signal characteristics,

          where R is a positive integer and M and N are positive integers greater than 1.

22. (Currently Amended)   The operating method as ~~recited~~claimed in claim 21, wherein M is equal to N.

23. (Currently Amended)   The operating method as ~~recited~~claimed in claim 21, wherein:

          one of the N audio signal segments ~~are~~is temporarily stored each time one of the M tuners is tuned to a respective one  
5 of the N audio sources; and

the R x N audio signal characteristics are extracted from the temporarily stored N audio signal segments.

24. (Currently Amended) The operating method as ~~recited~~claimed in claim 21, wherein selected ones of the R x N audio signal characteristics correspond to tempo, tone, and energy for music included in the N audio signal segments.

25. (Currently Amended) The operating method as ~~recited~~claimed in claim 21, wherein selected ones of the R x N audio signal characteristics correspond to words extracted from speech included in the N audio signal segments.

26. (Currently Amended) The operating method as recited in claim 21, wherein said operating method further comprising~~comprises~~ the step of:

generating a control signal for causing the audio output  
5 circuitry to reproduce the selected one of the N audio signals responsive to a user selected one of the R x N audio signal characteristics.

27. (Currently Amended) The operating method as recited in claim 21, wherein said operating method further comprising~~comprises~~ the step of:

generating a control signal for causing the audio output  
5 circuitry switch between an output one of the N audio signals and a  
monitored one of the N audio signals whenever a audio signal sample  
indicative of the occurrence of an event of interest to a user.

28. (Currently Amended) A memory storing computer readable instructions for causing a processor associated with an audio recorder-player to instantiate at least one of predetermined functions, including:

a music classification function permitting the audio recorder-player to automatically classify music in received audio signals based on audio features,

a watchdog function permitting the audio recorder-player to automatically respond to the occurrence of a predetermined audio event,

a news review function permitting the audio recorder-player to accumulate and play audio signals corresponding to news of interest to the user of the audio recorder-player,

a time shift function permitting the audio recorder-player to record audio signal programs to be played at a later time, and

an auto pilot function permitting the audio recorder-player to automatically operate based on an operational preference pattern established by the user.